Common Operations Development Environment (CODE)

Ganger, T., A. Stern, R. Saffle, and M. Istok, 2001: Integrating new algorithms into the WSR-88D: Algorithm development in the pre-CODE environment. *Preprints, 17ᵗʰ International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology*, American Meteorological Society, Albuquerque, 14-18 January 2001, p. 119-122.

Stern, A., T. Ganger, R. Saffle, and M. Istok, 2001: CODE design and serviced for the WSR-88D ORPG: The future of radar algorithm development. *Preprints, 17ᵗʰ International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology*, American Meteorological Society, Albuquerque, 14-18 January 2001, p. 123-127.

Dual Polarization

Keeler, R.J., J. Lutz and J. Vivekanandan, 2000: S-Pol: NCAR's polarimetric Doppler research radar, *IGARRS-2000*, IEEE, Honolulu, HI, 24-28 Jul 2000, 4pp.

Vivekanandan, J., D. Zrnic, S. Ellis, R. Oye, A. Ryzhkov, and J. Straka, 1999: Cloud microphysics retrieval using S-band dual-polarization radar measurements. *Bulletin of the American Meteorological Society,* **80,** 381-388

Open Radar Data Acquisition (ORDA)

Elvander, R., S. Holt, B. Bumgarner and R. Ice, 2001: Weather surveillance radar – 1988 Doppler (WSR-88D) open radar data acquisition (ORDA) enhancements. *Preprints, 30ₜₕ International Conference on Radar Meteorology*, American Meteorological Society, Munich, Germany, 19-24 July 2001, p. 694-697.

Saffle, R., M. Istok and L. Johnson, 2001a: NEXRAD open systems – progress and plans. *Preprints, 17ₜₕ International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology*, American Meteorological Society, Albuquerque, 14-18 January 2001, p. 97-101.

Saffle, R., M. Istok and L. Johnson, 2001b: NEXRAD open systems – progress and plans. *Preprints, 30ₜₕ International Conference on Radar Meteorology*, American Meteorological Society, Munich, Germany, 19-24 July 2001, p. 690-693.

Precipitation Processing Subsystem

Fulton, R., J. Breidenbach, D. J. Seo, D. Miller, and T. O'Bannon, 1998: The WSR-88D rainfall algorithm. *Weather and Forecasting*, **13**, 377-395.

O'Bannon, T., 1997: The enhanced WSR-88D Precipitation Processing Subsystem (PPS), *Preprints, 14th International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology*, American Meteorological Society, January, Phoenix, AZ.

Radar Echo Classifier

Kessinger, C., S. Ellis, and J. Van Andel, 1999: A fuzzy logic, radar echo classification scheme for the WSR-88D. *Preprints,* 29th *International Conference on Radar Meteorology*, American Meteorology Society, 12-16 July 1999, Montreal, Canada, 576-579.

Kessinger, C., and J. Van Andel, 2001: The Radar Echo Classifier for the WSR-88D. *Preprints, 17th International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology,* American Meteorological Society, Albuquerque, 14-18 January 2001, p. 137-141.

Kessinger, C., S. Ellis, and J. Van Andel, 2001: NEXRAD Data Quality: The AP clutter mitigation scheme. *Preprints, 30th International Conference on Radar Meteorology*, American Meteorological Society, Munich, Germany, 19-24 July 2001, p. 707-709.

Kessinger, C., S. Ellis, and J. Van Andel, 2002: NEXRAD Data Quality: An update on the AP clutter mitigation scheme. *Preprints, 18th International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology*, American Meteorological Society, Orlando, 13-17 January 2002, p. 127-129.

Kosko, B. 1992: *Fuzzy systems and neural networks*. Prentice Hall, NJ

Pratte, F., D. Ecoff, J. Van Andel, and R.J. Keeler, 1997: AP clutter mitigation in the WSR-88D. *Preprints, 28th Radar Meteorology* Conference, AMS, Austin, TX, 7-12 Sep. 1997.

Van Andel, J., 2001: Radar echo classifier algorithm development using Python. *Preprints, 30th International Conference on Radar Meteorology*, American Meteorological Society, Munich, Germany, 19-24 July 2001, p. 704-707.

Range Correction Algorithm

Seo, D. J., J. Breidenbach, R. Fulton, D. Miller, and T. O'Bannon, 2000: Real-Time Adjustment of Range-Dependent Biases in WSR-88D Rainfall Estimates due to Nonuniform Vertical Profile of Reflectivity. *Journal of Hydrometeorology*: **1**, 222-240.

Range/Velocity Ambiguity Mitigation

Ellis, S., G. Meymaris, and C. Frush, 2002: Overview of range and velocity ambiguity mitigation uving the SZ(8/64) phase code. *Preprints, 18th International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology*, American Meteorological Society, Orlando, 13-17 January 2002, p. 130-132.

Frush, C., and J. Daughenbaugh, 1999: Reduction of radar range ambiguities: A performance evaluation, *Preprints, 15th International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology*, American Meteorological Society, Dallas, TX.

Frush, C., and R. Doviak, 2001: Range ambiguity mitigation for NEXRAD using SZ phase coding. *Preprints, 30th International Conference on Radar Meteorology*, American Meteorological Society, Munich, Germany, 19-24 July 2001, p. 698-700.

Sachidananda, M., and D. Zrnic, 1997: Phase coding for resolution of range ambiguities in Doppler weather radar, *Preprints, 28th Conference on Radar Meteorology*, American Meteorology Society, Austin, TX, 246.

Sachidananda, M., D. Zrnic, and R. Doviak, 1997: *Signal Design and Processing Techniques for WSR-88D Ambiguity Resolution, Part 1*, National Severe Storms Laboratory.

Sachidananda, M., D. Zrnic, R. Doviak, and S. Torres, 1998: *Signal Design and Processing Techniques for WSR-88D Ambiguity Resolution, Part 2*, National Severe Storms Laboratory, June 1998, 105 pp.

Reflectivity Compensation (ZCOMP)

Ellis S., 2001: Compensating reflectivity for clutter filter bias in the WSR-88D. *Preprints, 17th International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology*, American Meteorology Society, Albuquerque, 14-18 January 2001, p. 142-145.

Volume Coverage Patterns (VCPs)

Brown, R., J. Janish, and V. Wood, 2000: Impact of WSR-88D Scanning Strategies on Severe Storm Algorithms. *Weather and Forecasting*: **15**, 90-102.

Brown, R., and V. Wood, 2001: Improved detection using negative elevation angles for mountaintop radar KMSX near Missoula, Montana. Preprints, *30th International Conference on Radar Meteorology*, Munich, Germany, Amer. Meteorology Soc., Boston.

Brown, R., V. Wood, and D. Sirmans, 2000: Improved WSR-88D scanning strategies for convective storms. *Weather and Forecasting*, **15**, 208-220.

Brown, R., V. Wood, and T. Barker, 2001: Improved detection using negative elevation angles for mountaintop WSR-88Ds: Simulation of KMSX near Missoula, Montana. Submitted to *Weather and Forecasting*.

Burgess, D., 1976: Single Doppler radar vortex recognition. Part I: Mesocyclone signatures. Preprints, *17th International Conference On Radar Meteorology*, Seattle, WA. Amer. Meteorology Soc., 97-103.

Conway, W., 1998: Examination of tornadic vortex signatures using a new WSR-88D scanning strategy. Preprints, *19th Conference On Severe Local Storms*, Minneapolis, MN, Amer. Meteorology Soc., 713-715.

Howard, K., J. Gourley, and R. Maddox, 1997: Uncertainties in WSR–88D measurements and their impacts on monitoring life cycles. *Weather and Forecasting*, **12**, 166–174.

Maddox, R., D. Zaras, P. MacKeen, J. Gourley, R. Rabin, and K. Howard, 1999: Echo Height Measurements with the WSR-88D: Use of Data from One Versus Two Radars. *Weather and Forecasting*, **12**, 455-460.

Mahoney, E. and R. Schaar, 1993: WSR–88D scan strategy impacts on the vertically integrated liquid product. Preprints, *26th International Conference on Radar Meteorology*, Norman, OK, Amer. Meteorology Soc., 44–46.

Pereira A., K. Crawford, and C. Hartzell, 1998: Improving WSR-88D Hourly Rainfall Estimates. *Weather and Forecasting,* **13**, 1016—1028.

Smith, Paul, 1998: On the minimum useful elevation angle for weather surveillance radar scans, *Journal of Atmospheric and Oceanic Technology*, **15**, 841-846.

U.S. Department of Commerce, National Technical Information Service. *Questions and Answers about Biological Effects and Potential Hazards of Radio Frequency Electromagnetic Fields*. Washington, D. C., 1999.

Wood, V., and R. Brown, 1997: Effects of radar sampling on single-Doppler velocity signatures of mesocyclones and tornadoes. *Weather and Forecasting*, **12**, 928-938.

Wood, V., and R. Brown, 1999: The optimization of WSR-88D scanning strategies for convective storms. Preprints, *29th International Conference on Radar Meteorology*, Montreal, PQ, Canada, Amer. Meteorology Soc., 229-231.

Wood, V., and R. Brown, 2001: Enhanced detection of low-altitude features using negative elevation angles from prototype mountaintop WSR-88Ds. Preprints, *30th International Conference on Radar Meteorology*, Munich, Germany, Amer. Meteorology Soc., Boston.